



"This year, we focus in particular on the **work we do**translating our scholarship and science through the world of public health practice."

DEAR COLLEAGUES:

WELCOME TO SPH THIS YEAR 2019.

Since our 2015 strategic plan, we have used "Think. Teach. Do. For the health of all." as the school's core purpose. That core purpose captures our mission and distills what we do into three constituent components: we generate scholarship and science; we teach the next generation of public health practitioners and thinkers; and we translate scholarship and science through the world of public health practice. In previous issues of *SPH This Year*, we focused on our work in scholarship and education. This year, we focus in particular on the work we do translating our scholarship and science through the world of public health practice.

The following pages showcase the outstanding work of our staff, students, faculty, and alumni engaged in the real world; in the hard business of creating a better world. Our community is engaged in an astonishing breadth of consequential issues—from improving life in our immediate community on Albany Street, to building healthier urban environments, to addressing gun violence—all of which are directly relevant to our fundamental aspiration as a school: to generate a healthier world for all. Thank you to all the members of our community who do this work every day, and to all who make it possible.

I hope you are as inspired as I am reading about it.

Marmly

Sandro Galea, MD, DrPH

Dean and Robert A. Knox Professor

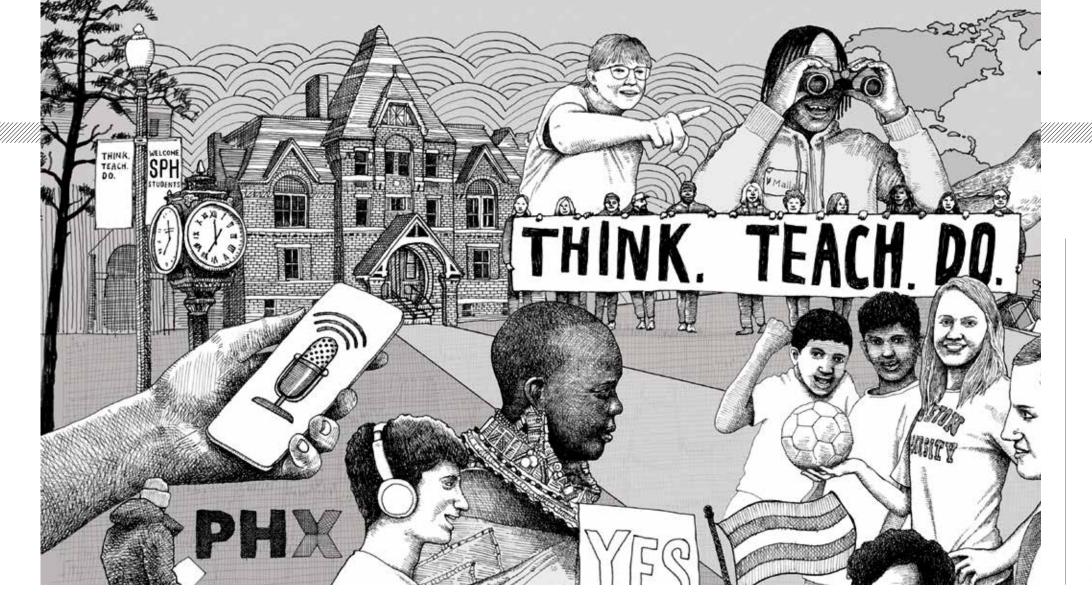
Sandro galea

Twitter: @sandrogalea

contents

COVER STORY

FIVE YEARS OF "THINK. TEACH. DO."
Defining SPH roles and putting them into practice.



36 SPH RY THE NUMBERS

FEATURES

GUN VIOLENCE SUMMIT ELEVATES TEEN ACTIVISM. High school students learn to voice concerns effectively.



24

GIVING YOUTH A
HEAD START ON
PUBLIC HEALTH.
PHX helps young
people develop
technical and
analytical skills.



COME IN FROM THE COLD.
Students help shelter Boston's homeless population.





MAKING SOME NOISE ABOUT NOISE. Sound, annoyance, and health in





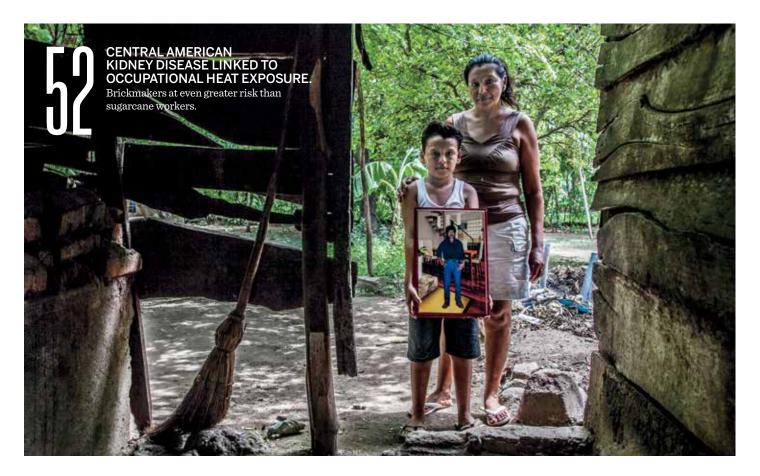
FEATURES



BREAK THE CYCLE.

Opioid use disorder and partner abuse often fuel one another. They need to be treated together.

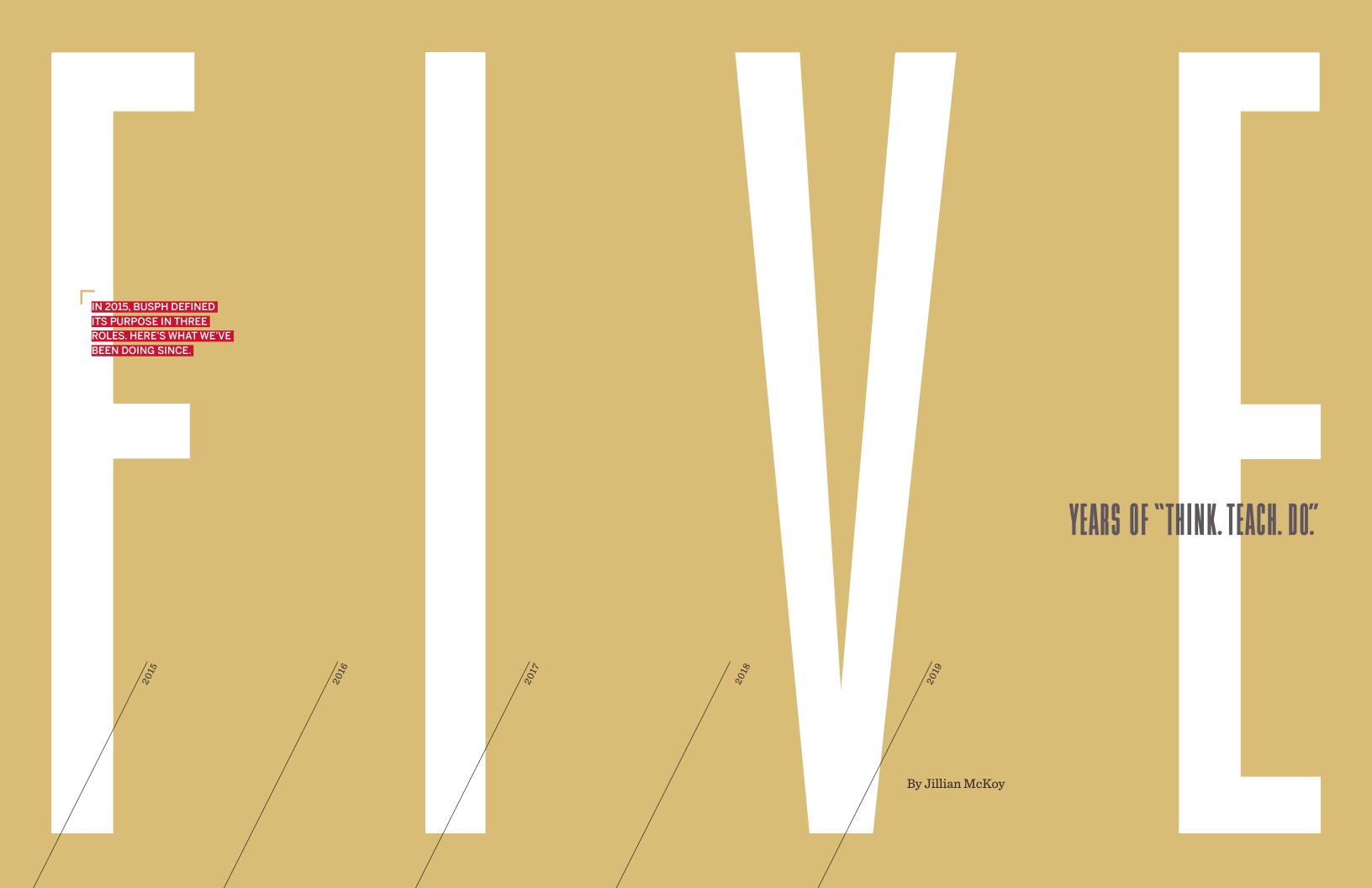
RESEARCH

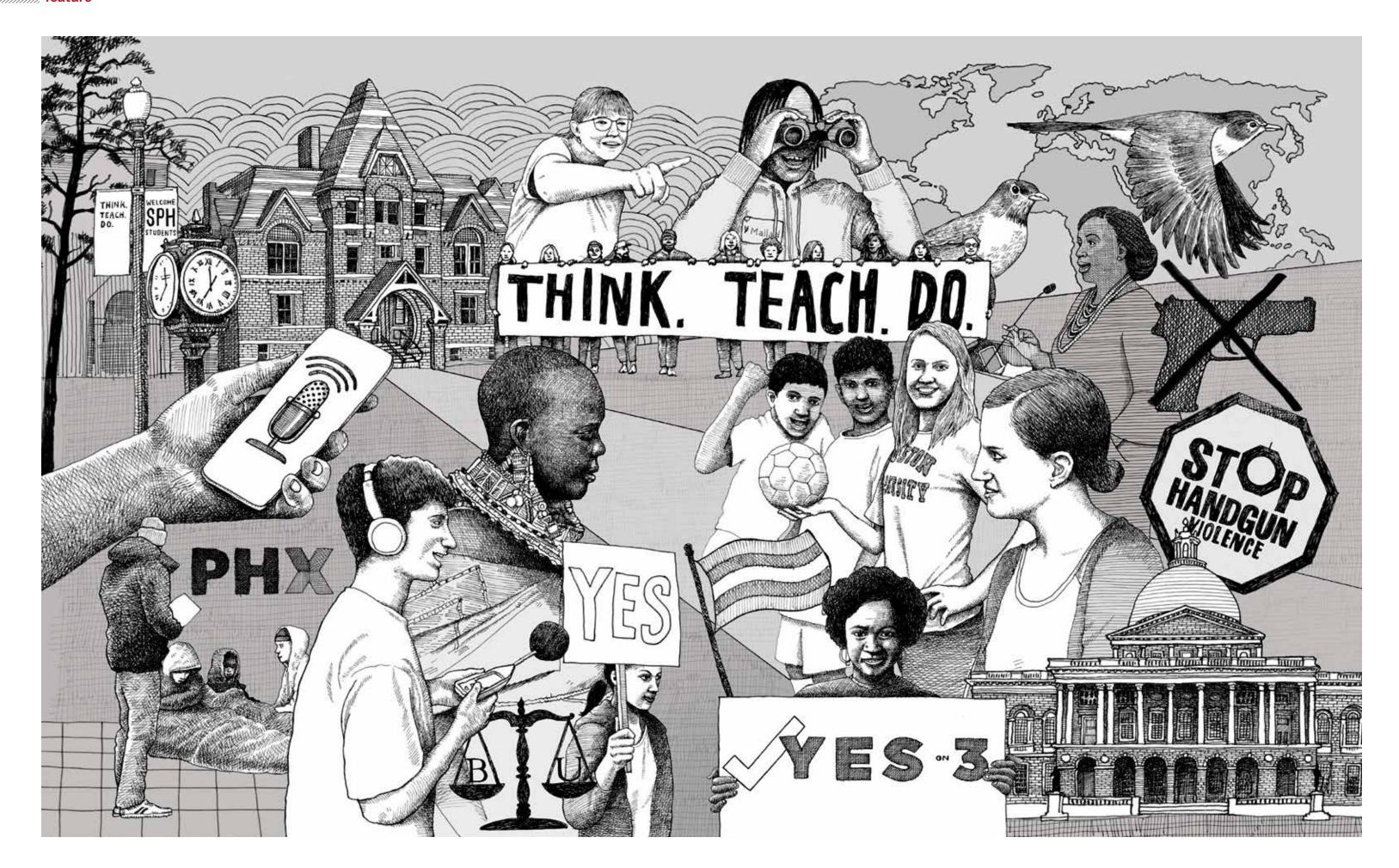


STUDENTS



THE HEALING POWER OF HIP-HOP. Hip-hop writing helps inmates process their situations.





WHETHER THEY ARE INTERROGATING state and federal lawmakers, pitching innovative solutions to community organizations, marching in support of social justice, or distributing water bottles on Albany Street, the students, faculty, and staff at the School of Public Health personify public health in action.

And amid today's political, economic, and social challenges, the need to put thought into practice has never been more critical.

"As a school, we recognize that in order to create change, it is important to teach our students about advocacy," says Harold Cox, associate dean for public health practice and associate professor of community health sciences.

In 2015, the School of Public Health revitalized its core purpose to elevate our three roles: generating research and scholarship, teaching it to our students, and translating this scholarship into meaningful action that protects and improves the health of all populations. Captured as "Think. Teach. Do. For the health of all," the school's dedication to advocacy and activism over the past five years has established SPH as an institutional leader in addressing and solving the world's pressing public health challenges.

"The school has always maintained a commitment to being part of the community and creating change," says Sandro Galea, Dean and Robert A. Knox Professor. "Over the past few years we clarified our focus to elevate the 'Do' into everything that we do, and now I think we're at a place where 'Think. Teach. Do.' are seen as the real pillars of the work of the school."

Galea says he is heartened to see students' energetic and sustained commitment to solving critical public health problems.

"There are multiple issues that we should have dealt with a long time ago as a society," Galea stresses. "I think our students lead us, and they should."

The school's recommitment to effecting change led to the Activist Lab launch in 2016. Assuming the duties of the former Practice Office, the Activist Lab serves as a catalyst for students, faculty, staff, and the general public to engage in innovative programs, develop new skills, and impact policy and system changes.

AS A SCHOOL, WE RECOGNIZE THAT IN ORDER TO CREATE CHANGE, IT IS IMPORTANT TO TEACH OUR STUDENTS ABOUT ADVOCACY."
HAROLD COX, ASSOCIATE DEAN FOR PUBLIC HEALTH PRACTICE AND ASSOCIATE PROFESSOR OF COMMUNITY HEALTH SCIENCES

"We realized that we needed to elevate the idea of practice," Cox explains. "We began to think about how we could engage people in thinking about what public health is, what does it mean to do the work of public health, and how do we get involved in the community in a real way?"

The lab's work focuses on three areas: workforce training; community engagement through short- and long-term projects; and activities that create change. The grantfunded Activist Bucks program supports students in developing short-term projects that directly engage community members, while the Activist Fellows program offers them an opportunity for in-depth work that influences state, national, or regional health policies.

The Activist Lab has also rallied in support of gun violence prevention and transgender rights, and in improving the health of low-income communities and increasing awareness of the opioid crisis. During the summer and fall of 2018, Activist Fellow Iris Olson (SPH'19) led schoolwide efforts in support of the Massachusetts "Yes on 3" campaign to uphold civil rights protections for the transgender community.



feature

SPH ALUMNI ARE MAKING A DIFFERENCE AROUND THE WORLD.

ALBANIA DJIBOUTI DOMINICA ANGOLA **EGYPT** ARGENTINA FL SALVADOR ARMFNIA **ERITREA** ARIIRA AUSTRALIA **FSWATINI ETHIOPIA** AZERBAIJAN FRANCE BAHAMAS GAMBIA GFORGIA BAHRAIN BANGLADESH GFRMANY BARBADOS GHANA BELGIUM GREECE BELIZE GRENADA **GUATEMALA** BERMUDA **BOLIVIA** HAITI ROTSWANA HONDURAS BRAZIL HONG KONG BRITISH VIRGIN **ICELAND** ISLANDS INDIA INDONESIA CAMBODIA CAMEROON IRAN ISRAFI CANADA CAPE VERDE ISLANDS ITALY CHILE **JAMAICA** CHINA JAPAN IORDAN COLOMBIA KA7AKHSTAN DEMOCRATIC REPUBLIC OF THE CONGO KFNYA

KUWAIT

DENMARK

LEBANON	MYANMAR	PAPUA NEW GUINEA
LESOTHO	NAMIBIA	PHILIPPINES
LIBERIA	NEPAL	POLAND
LIBYA	NETHERLANDS	REPUBLIC OF KOREA
MALAWI	NEW ZEALAND	REPUBLIC OF
MALAYSIA	NIGER	THE CONGO
MEXICO	NIGERIA	RUSSIA
MOLDOVA	NORWAY	RWANDA
MOROCCO	OMAN	SAUDI ARABIA

SENEGAL

PAKISTAN

MO7AMBIOUF

SINGAPORE	TAIWAN, R.O.C.
SOUTH AFRICA	TAJIKISTAN
SPAIN	TANZANIA
SRI LANKA	THAILAND
ST. VINCENT/	TOGO
THE GRENADINES	TRINIDAD AND
SUDAN	TOBAGO
SURINAME	TUNISIA

TURKEY

UGANDA





SWEDEN

SWITZERLAND

"Our students are passionate about so many things, especially social justice, diversity and inclusion, and health equity," says Lisa Sullivan, associate dean for education and professor of biostatistics. "Times are changing, and the way we interact with our students is changing as well. It's an exciting time."

The school's "Do" work extends beyond its activism. As part of its mission to change the conversation around health within and beyond the SPH community, the school redesigned its website and newsletters to spur dialogue around pressing matters. An expanded suite of signature programs now includes Dean's Seminars and Symposia featuring influential stakeholders who share knowledge on issues including health disparities, homelessness, mental health, and the opioid crisis.

To disseminate scholarship to the broadest audience possible, SPH also developed two outward-facing digital platforms that attract worldwide audience engagement.

Launched in October 2016, Public Health Post (PHP) informs the broader conversation on health through a variety of digestible public health content created each week by student fellows, journalists, policymakers, academics, and practitioners.

"We now have readers in 150 countries and all 50 states," says Nicholas Diamond (SPH'17), managing editor of PHP. "It's really interesting to see the breadth of who is consuming our content."

Population Health Exchange (PHX), SPH's resource hub and continuing education initiative, was developed in September 2017 to provide specific competencies to advance graduate careers. In just two years, PHX has expanded to include a range of digital and in-person educational programming for youths and adults, plus webinars and the *Free Associations* podcast, which has been downloaded in more than 100 countries.

"Our reach is really expanding, because we're delivering information in so many different ways," explains Leslie Tellalian, director of lifelong learning.

SPH student commitment to creating tangible public health change is most apparent in the career paths they embark upon after graduation. Graduates are distributed fairly evenly among the healthcare field, government and nonprofit sectors, and private industry, with a noticeable growing interest in consulting.

According to Lisa Toby, assistant dean for career engagement, "Students are also joining innovative start-ups and taking on health IT roles. They're excited to use technology to reach populations and provide care in new ways."

As the work of public health is never finished, neither is the school's dedication to supporting and elevating the endeavors of SPH graduates, who become part of a lifelong, 10,000-member global network once they enroll at the school.

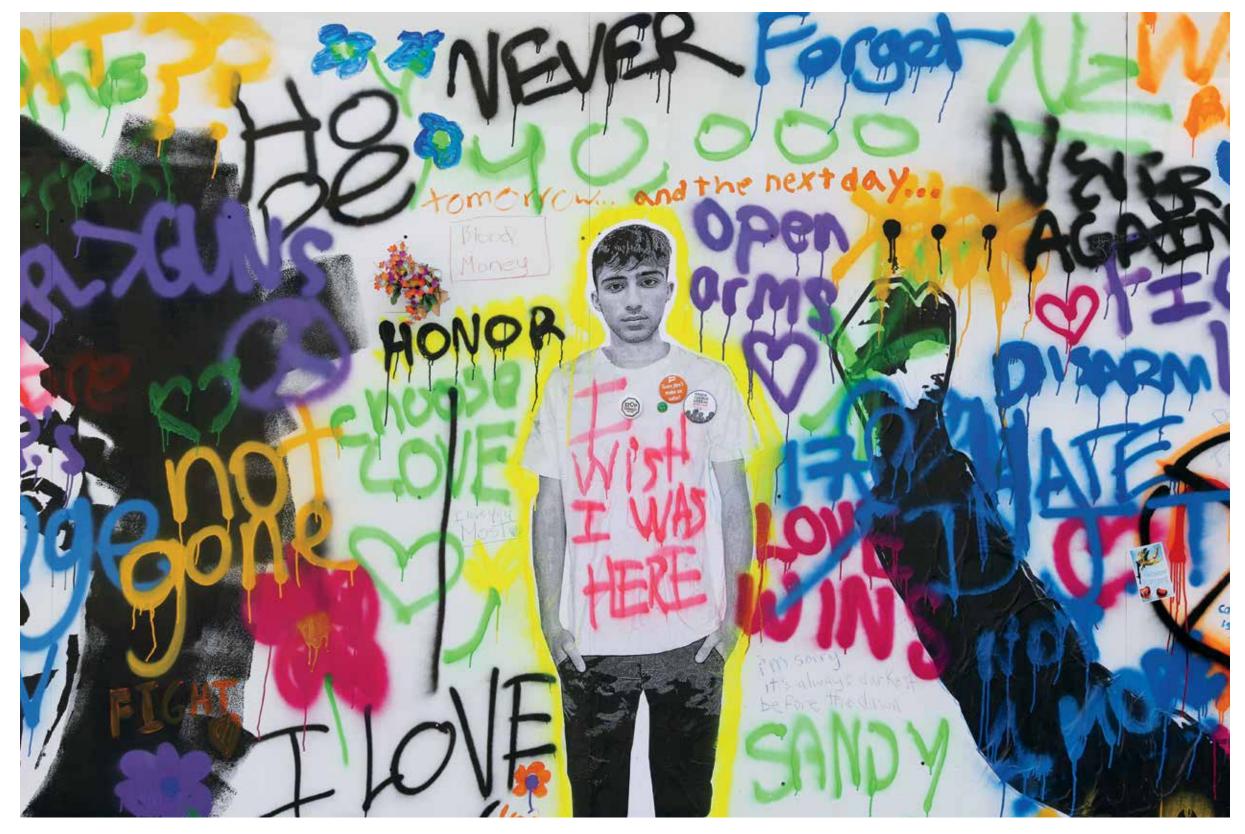
"Hosting 40 different events across the country for the school's 40th anniversary celebration in 2016 really reinvigorated alumni," recalls Jacoba van Heugten, assistant dean of development. To foster continued engagement with the school, the Development and Alumni Relations team continued hosting Think. Teach. Do. alumni receptions in cities across the country and the world.

Dean Galea says that alumni immersion in advocacy and activism around the globe makes the school's embrace of bold public health action not only ethical, but pragmatic.

"One of the great privileges of working in a school is that there are people early in their life stage who are going to go on and do good things," he says. "I have very little paper in my office—only one folder of notes from students and alums who tell me how well they're doing, and how much the school changed their trajectory.

"Hands down, those are my proudest moments."

44 **OUR STUDENTS ARE PASSIONATE ABOUT SO** MANY THINGS. **ESPECIALLY** AND INCLUSION AND HEALTH **EQUITY. TIMES** ARE CHANGING. AND THE WAY WE INTERACT WITH **OUR STUDENTS IS CHANGING AS EXCITING TIME.**" LISA SULLIVAN, ASSOCIATE DEAN FOR EDUCATION AND PROFESSOR OF BIOSTATISTICS



During the Gun Violence Prevention Student Summit at SPH, students created an art installation featuring graffiti messages of hope and determination.

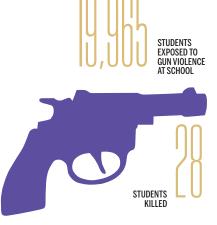
GUN VIOLENCE SUMMIT ELEVATES TEEN ACTIVISM.

ON THE HEELS OF THE ONE-YEAR ANNIVERSARY

of the Marjory Stoneman Douglas High School shooting and just hours after a mass shooting at two New Zealand mosques, New England high school students gathered at the School of Public Health for a three-day Gun Violence Prevention Student Summit, held March 15–17, 2019.

HIGH SCHOOL STUDENTS
LEARN TO EFFECTIVELY
VOICE THEIR CONCERNS AT
THREE-DAY EVENT.

SCHOOL GUN VIOLENCE IN 2018



SOURCE: EDWEEK.ORG

The Activist Lab, Stop Handgun Violence, and March for Our Lives (MFOL): Boston partnered to provide an opportunity for student activists to engage with lawmakers and activists, share personal stories, examine the intersectional issues around gun violence, and learn best strategies and practices to advance their mission and create safe communities at home, work, and school.

"We all know that young people are powerful change makers, but that's only if we have the right resources and support," remarked Vikiana Petit-Homme, executive director of MFOL: Boston, as she introduced the summit. "We can be that resource for each other."

Attorney General Maura Healey addressed Massachusetts' role as a leader in gun reform, as well as the persistent problems of gun trafficking, straw purchasing, racial and economic disparities among gun violence victims, lack of mental health resources, and national gun law reform.

"It is a reality for too many in this city and state who have to worry about how

kids will get to school, or if they will be safe walking to the park," she said. "There are fears and anxieties that no family should have to live with."

US Representative Ayanna Pressley lauded the students for their unwavering activism.

"The people closest to the pain should be closest to the power driving and enforcing the policymaking," she said.

"There is nothing radical about respecting youth voices or about extending the table of democracy to give you a seat.

"You're not only our future leaders, you're our present leaders."

Over the three days, the students also shared their personal experiences with gun violence.

"If a person is killed by a police officer, it's not counted as a homicide," said Trevaughn Smith, public relations and strategy director for MFOL: Springfield and a freshman at Hartwick College in New York. "Meanwhile, other countries are providing proper training for police officers to disarm a situation without necessarily resorting to violence."



44 THE PEOPLE **CLOSEST TO THE** PAIN SHOULD BE **CLOSEST TO THE POWER DRIVING** AND ENFORCING THE POLICY-MAKING. THERE IS NOTHING RADICAL ABOUT RESPECTING YOUTH VOICES **OR ABOUT EXTENDING** THE TABLE OF **DEMOCRACY TO** GIVE YOU A SEAT. YOU'RE NOT ONLY OUR **FUTURE LEADERS,** YOU'RE OUR

US REPRESENTATIVE, MASSACHUSETTS 7TH

CONGRESSIONAL DISTRICT

WE CAN END GUN VIOLENCE



Left: Massachusetts Attorney General Maura Healey speaks with students. Right: Manuel Oliver, father of slain Marjory Stoneman Douglas student Joaquin Oliver, created a nonprofit that uses urban art to educate about gun violence. Opposite: US Representative Ayanna Pressley and Harold Cox, associate dean for public health practice, associate professor of community health sciences, and director of the Activist Lab.

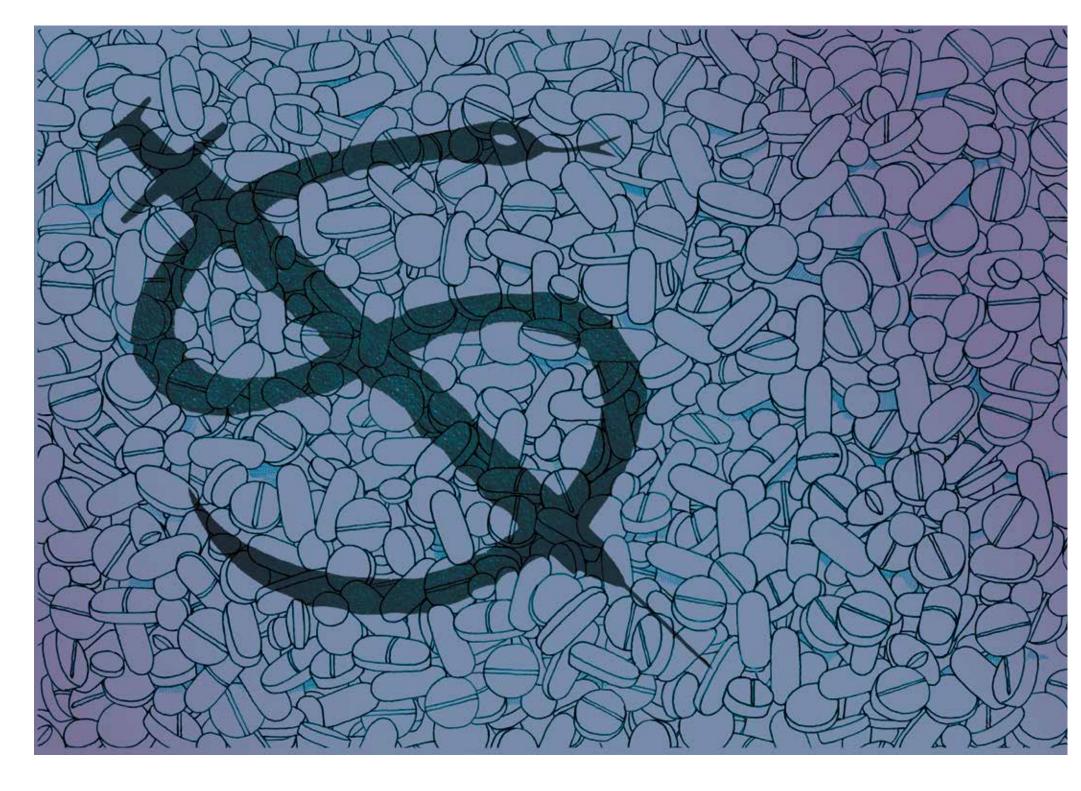
Between presentations and guest speakers, students attended workshops on advocacy-related topics, including voter registration, lobbying, coalition building, and fundraising strategies. They also learned about resources in Boston for people who are impacted by gun violence.

The summit culminated with an interactive exercise of art and activism with Manuel Oliver, whose Change the Ref nonprofit uses urban art and nonviolent creative confrontation to educate and advocate for gun reform. As part of Oli-

ver's nationwide Walls of Demand pop-up installation, students painted graffiti messages of hope, determination, and positive action on a board stationed on SPH's Talbot Green.

The messages surrounded a mural of Oliver's slain son, Joaquin.

"There are more good people like us in the world than there are bad people," Oliver said. "We are making a big impact."



What Does Opioid Use Disorder Treatment Fraud Look Like?

AS THE OPIOID CRISIS HAS GROWN, so too has the number of opioid use disorder treatment programs. But in this widely unregulated system, some "sober homes" and other programs prove to be scams, taking on patients to milk insurance without providing real treatment.

With support from the Laura and John Arnold Foundation, part of Arnold Ventures, four professors from the Department of Health Law, Policy & Management are working on a two-year project to identify insurance claim patterns that point to substance use disorder treatment scams; they will then build a tool for insurers and regulators to understand just how big the problem is and how to stop it. Law and consulting firm Faegre Baker Daniels and insurers will test the model by having mystery shoppers contact the potentially fraudulent programs posing as people interested in treatment.

"This problem affects everybody," says Melissa Garrido, research associate professor of health law, policy & management and lead researcher on the study, adding that it harms not only the people seeking treatment but also insurers, who have to make up their losses. "Everybody's rates go up," she points out. "The fraud wasn't targeted at the general public, but the general public suffers from it."

There are a few known patterns. "You don't need to run a urinalysis once a day or multiple times a day," she explains, because opioids remain detectable in urine for about a week. "Unbundling" lab tests can also be a red flag, where the patient—and thus the insurer—is charged for separate tests from a single blood draw.

Garrido says that ultimately, the hope for this project is that it will help create a balance; insurers won't have to make it too hard for people with opioid use disorder to receive care that really *will* be care.

"These are patients who are at risk for really awful outcomes, including fatal overdose," she says. "They think they're in a legitimate program, but they're not receiving treatment—they're just being taken advantage of."

[&]quot;These are patients who are at risk for really awful outcomes, including fatal overdose.

They think they're in a legitimate program, but they're not receiving treatment—
they're just being taken advantage of."

⁻MELISSA GARRIDO, RESEARCH ASSOCIATE PROFESSOR OF HEALTH LAW, POLICY & MANAGEMENT

Hacking Public Health

FORTY VISIONARY MINDS CONVENED WITH A SHARED

PURPOSE of improving the health of others at the inaugural Global Impact Challenge: Health & Human Rights Hackathon (GIC), which took place at the Boston University BUild Lab April 5-7, 2019.

Organized by second-year students Anisha Borthakur and Mackenzie Bullard and recent graduate Valentina Vega (SPH'19), the event brought together student innovators from the BU community and beyond to further the goal of placing humanity, human rights, and compassion at the forefront of health innovation.

"We want to develop a human design-thinking process that puts people over profit," Bullard noted in introducing the event.

In a whirlwind 48 hours, the students formed teams, identified a public health need, and hunkered down in the BUild Lab to devise a novel solution to their issue. By Sunday afternoon, the groups presented their ideas—complete with videos, slideshows, and examples—to a panel of judges that included Associate Professor of Global Health James Wolff and second-year MPH student Dielle Lundberg.

Among the winners was Team Every Hand Is a Hero, which aimed to combat sex trafficking by partnering with menstrual product companies to disguise a quick-response barcode and trafficking hotline number in their products. The researchfocused Knowledge Gap Award was presented to Project Green Temple, a team that sought to address the lack of clean water available in Odisha, India, by developing a harvesting net to capture and purify fog and rainwater.

"It makes me feel confident that my colleagues and people in my age group are looking to innovate from a caring perspective," Vega said.



DESIGN-THINKING PROCESS

















COMMUNICATE YOUR IDEA.

PROTOTYPE









SHARE YOUR IDEA WITH OTHERS.

INNOVATE@BU; NOUN PROJECT

"We want to develop a human design-thinking SOURCES: AHLEA ISABELLAprocess that puts people over profit."

-MACKENZIE BULLARD, SECOND-YEAR MPH STUDENT



REFRAME SEARCH FOR MEANING





GATHER AND APPLY FEEDBACK TO IMPROVE YOUR IDEA.

"The profits from exploiting poor people are too high. It is too easy to make too much money keeping poor people poor."

BYRON RUSHING MASSACHUSETTS STATE REPRESENTATIVE

HOUSING INSECURITY, AND THE CHANGING URBAN LANDSCAPE

"Our country was founded on the idea that some people can totally control the lives and bodies of other people. So I'm surprised at the extent of the surprise that we don't live in a society where people have the ability to protect

their own bodies."

LYNN PALTROW
FOUNDER AND EXECUTIVE
DIRECTOR, NATIONAL ADVOCATES
FOR PREGNANT WOMEN

SHINE LECTURE: THE "OTHER" PROBLEM IN THE QUEST FOR PREGNANT WOMEN'S PERSONHOOD

face many health challenges in 2018, but we are here because we are unwilling to accept the conditions that create poor health. This is why our school exists to do something about it."

"It is true that we

SANDRO GALEA DEAN AND ROBERT A. KNOX PROFESSOR

"You have to be very careful about making promises that are either not yours to make or that are inconsistent."

GAIL WILENSKY ECONOMIST AND SENIOR FELLOW, PROJECT HOPE

"It's absolutely critical that we find ways to empower the largest part of the health workforce to deliver high-quality care, or we're not going to achieve universal health coverage by 2030."

BARBARA STILWELL EXECUTIVE DIRECTOR, NURSING NOW

DEAN'S SYMPOSIUM: NURSING AND THE HEALTH OF POPULATIONS

"Death is a solitary experience. How can we as a group decide what avoidable distress and suffering is? Only the person in the deathbed knows what that means."

SALLIE TISDALE AUTHOR AND RN, PROVIDENCE ELDERPLACE

DEAN'S SYMPOSIUM: DEATH AND DYING: A POPULATION HEALTH PERSPECTIVE

"This isn't a new industry; this isn't a new product; this isn't a new idea."

KEITH COOPER CEO, REVOLUTIONARY CLINICS BICKNELL LECTURE: SO WE LEGALIZE MARIJUANA.

"We're an urban state with the lowest gun death rate in the nation, and we've proven the NRA's worst nightmare—that gun laws save lives and you don't have to ban most guns in order to do it."

JOHN ROSENTHAL COFOUNDER, STOP HANDGUN VIOLENCE







GIVING YOUTH A HEAD START ON PUBLIC HEALTH.

ON JUNE 24 THROUGH 28, the next generation of doctors, marine biologists, nutritionists, and researchers jump-started their careers during Population Health Exchange's inaugural PopHealthExperience youth enrichment program at the School of Public Health.

The immersive summer program introduced rising seventh- through tenth-grade Boston-area students to the foundations of public health, with an emphasis on biostatistics, epidemiology, and environmental health.

"It's been a dream of ours to offer a program for younger students who may not have had any exposure to population health," noted Leslie Tellalian, director of lifelong learning. "We chose this age group because there was a lot of opportunity to offer hands-on activities that are academic, but still interesting and fun, during the summer."

Organized by Francisco Patino, PHX administration and finance manager, along with MPH stu-

dents and PHX interns Abbigayle Monssen and Catherine Stever, the program featured interactive workshops that equipped students with the technical and analytical skills necessary to solve public health problems.

The group learned to identify, frame, and shape public health issues and policies in sessions led by Sophie Godley, clinical assistant professor of community health sciences, and Harold Cox, associate dean for public health practice and associate professor of community health sciences. They also honed skills in epidemiology study design with Megan Healey, clinical assistant professor of epidemiology, and data interpretation and visualization using JMP statistical software with Lisa Sullivan, associate dean for education.

The students also had an opportunity to observe real-world data. Professor of Environmental Health David Sherr guided them on a tour of his laboratory in the Department of Environ-



Students measure and compare sound levels using a noise meter on busy streets in the South End.









mental Health, where they viewed liquid nitrogen tanks and freezers of tissue cultures, and even inspected cancer cells under a microscope.

"The reason this tissue culture room is off to the side is because we have to limit the flow of bacteria all around us," Sherr explained. "We're breathing in bacteria and fungi all the time—but we don't die from it because our immune system is always on the prowl."

The group also examined issues of environmental and social justice during a walking tour of the South End led by Erica Walker, postdoctoral associate in the Department of Environmental Health and founder of the Community Noise Lab. From the Medical Campus to Dudley Square, students used a noise meter to measure and compare sound levels and quality at different street corners, and then discussed how sound can impact the health of different communities.

Putting their public health knowledge to the test, students were tasked with developing a program or policy solution on public health issues such as substance use disorder, vaping, homelessness, and overprescribing of antibiotics.

"I've had the privilege this past week of having a conversation with the future—and I'm pleased to report that we're in very good hands," Patino told the students after the presentations. "I hope that you will take the public health frameworks, social justice frameworks, and everything else that you learned this week, as you make your communities a better place."



Doing the Work That We Pledged to Do

WHEN AYANNA PRESSLEY became the first African American woman to represent Massachusetts in the US House of Representatives last year, her then-research director Lynese Wallace (SPH'17) called the historic moment a victory beyond her wildest dreams.

Once Pressley transitioned to Washington, DC, Wallace became her policy advisor to help shape strategies that will improve the physical, economic, and mental health and well-being of constituents in the commonwealth's 7th district.

"I tend to use the word 'whirlwind' a lot to describe our first 100 days," says Wallace, whose first weeks in the new role occurred during an unprecedented 35-day federal government shutdown.

In the months since the government reopened, Wallace has refocused her priorities to help advise on many of the 100-plus bills that Pressley has cosponsored addressing affordable housing, access to quality and affordable health care, health disparities, anti-harassment measures for women in the workplace, and consumer rights protections.

"Part of my job is to keep a pulse on issues such as gun violence and trauma prevention, the black maternal mortality crisis, agriculture and nutrition services, and issues that affect the elderly, such as Medicare and prescription drug coverage," she explains.

"It's such a rare feat for me to be able to work in Congress at such an unprecedented time in our history," Wallace says. "I feel incredibly grateful to be working in public service under the leadership of one of my 'sheros.' I'm excited to continue learning and working with the community to help drive real policy change."

BILLS RANGING FROM AFFORD-ABLE HOUSING TO HEALTH DISPARITIES INFORMED BY WALLACE AND COSPONSORED BY PRESSLEY

"It's such a rare feat for me to be able to work in Congress at such an unprecedented time in our history.

I'm excited to continue learning and working with the community to help drive real policy change."

research soston university school of public health | sph this year 2019 | 31 students



When Medical Students Teach High Schoolers CPR, Both Benefit

FOR YEARS, the Bee Gees' 100-beats-per-minute, 1977 hit song "Stayin' Alive" has been part of teaching potential rescuers—including first-year School of Medicine students at Boston University—the correct tempo for CPR chest compressions. But when Anita Knopov, also a predoctoral fellow at the School of Public Health, and her fellow medical students started teaching high schoolers the procedure, they had to find more up-to-date songs (Wiz Khalifa's "Black and Yellow," for example, has the right beat).

Whatever the track of choice, Knopov and her colleagues found that future doctors teaching high schoolers CPR does work. Their study, published in the *Journal of Education*, shows that their hands-on program, called PumpStart, greatly improved the knowledge, skills, and confidence of medical and high school students alike.

PumpStart recruits first-year BU medical students to teach CPR at three nearby high schools. The class includes watching an edited-down version of the American Heart Association's *CPR Anywhere* video— "We cut out a lot of the boring and dry parts," Knopov explains—then practicing with a CPR mannequin and the requisite 100-beats-per-minute jam.

The medical students reported feeling significantly more confident and comfortable teaching and answering questions about CPR. And according to Knopov, the high schoolers were energized by the hands-on opportunity: "It feels much more real, because there is this actual skill, this real thing that could eventually come into use. Students, from the beginning of time to med school, are always looking for ways to do something practical and skill-based instead of just reading a textbook."

Working Toward Menstrual Health Equity

ACCORDING TO Caroline Ezekwesili, Kimberly Blair, Ebosetale Eromosele, Hannah Simon, Hithu Kodicherla, and Makeda Negash-Alemnesh, access to menstrual hygiene products is a human right. The six MPH students founded the Period Project at the end of 2018, with the mission of achieving menstrual equity on campus and beyond.

People in the US spend more than \$2 billion per year on menstrual hygiene products, including millions of dollars on the "tampon tax" since most states tax menstrual products as nonessential items. The reason, the students argue, is the stigma involved: "If individuals in the US had to bring their own toilet paper and soap to public restrooms, there would be public uproar. Products that are part of the menstrual process should be provided for free in the same manner as the other hygiene products commonly found in public restrooms."

To accomplish that, the Period Project launched a pilot program in April of 2019, stocking eight SPH restrooms with free menstrual products for students, faculty, and staff. In true public health fashion, they also released a menstrual hygiene management survey in March to assess needs and practices on the Medical Campus, and to evaluate the impact of the pilot program.

They're also working to expand access to menstrual hygiene products beyond the Medical Campus. Thanks to an Activist Bucks innovation grant, the Period Project holds "Monthly Flow Drives" to gather menstrual products to donate to homeless shelters in SPH's neighborhood.

The project founders point out that there is no "one-size-fits-all" menstrual experience:

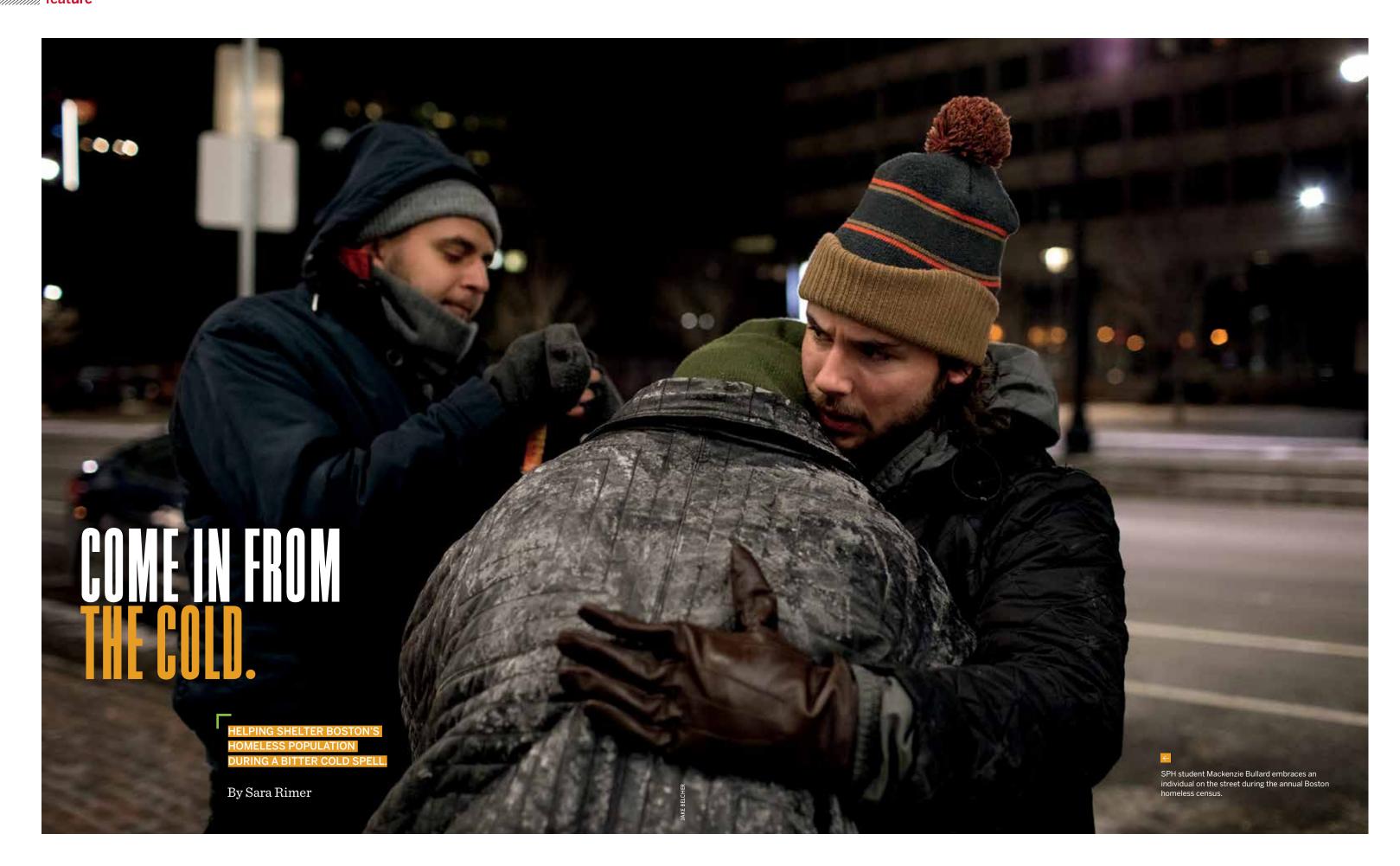
"This is why all menstruating individuals should have equitable access to a broad array of hygiene products to support them throughout their journey—period."



"If individuals in the US had to bring their own toilet paper and soap to public restrooms, there would be public uproar.

Products that are part of the menstrual process should be provided for free in the same manner as the other hygiene products commonly found in public restrooms."

- PERIOD PROJECT TEAM





Associate Dean for Public Health Practice and Associate Professor of Community Health Sciences Harold Cox addresses SPH volunteers at Boston's City Hall Plaza.

AT 10:30 PM ON JANUARY 30, it was dark on the streets of Boston, and bitterly cold. Mayor Martin Walsh had just kicked off the 39th annual Boston homeless census, telling more than 300 volunteers at City Hall that their work was important. He gave a shout-out to public safety officials, first responders—and to a group of SPH students and faculty, who had been joining the census for a number of years.

Just minutes after their group left City Hall, heading toward TD Garden (their coverage area stretched from just beyond City Hall Plaza to North Station), one SPH student, Mackenzie Bullard, along with three classmates and Wendy Heiger-Bernays, clinical professor of environmental health, was approached by a man weaving his way down a frozen Cambridge Street, his thin leather jacket open to the sub-zero wind chill. His gloveless fingers clutched the stub of a cigarette.

"Do you guys have a light?" asked the man, who appeared to be intoxicated.

"I'm Mackenzie," said Bullard, who has worked closely with the homeless community through the Activist Lab. Unfortunately, he told the man, none of them had a light. "We're with the homeless census," Bullard said. "It's really cold out here tonight. Do you need a place to stay?"

IN THIS WORLD
WHEN YOU DON'T
HAVE ANYTHING,
YOU STILL HAVE
YOUR
DIGNITY
AND YOU'RE
GOING TO
FIGHT TO KEEP
THAT DIGNITY."
RAFIK WAHBI,
MPH STUDENT

The ferocious winds made it hard to hear—or talk.

"Got a light?" the man repeated.

Bullard offered again to help him get inside.

"Got a light?" the man asked.

Back and forth it went. The homeless man—he said his name was Bobby—headed into the street, dodging a couple of cars. Concerned for his safety, Bullard and fellow SPH student Rafik Wahbi followed close behind.

Out of the dark and cold, two more homeless people appeared on the sidewalk near Bobby, a man and a woman, both of them ill-clad for the weather and looking exhausted and miserable. They immediately accepted the group's offer of shelter. Heiger-Bernays called Jake Sullivan, BU's vice president for government and community affairs, to ask him to dispatch an outreach van.

While the three of them stood in the cold, Bobby asked the woman if she had a light. Her boyfriend angrily told Bobby to back off, threatening to hurt him. Bobby threatened him back.

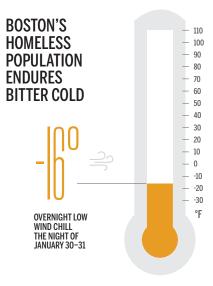
Remembering something they'd learned in their bystander intervention training—change the subject, if necessary—Wahbi and Bullard made Bobby an offer: if they bought him cigarettes and a lighter, would he go to a shelter? Yes, he would. Buying cigarettes for someone may not have been ideal, but as Wahbi noted later, this was a case of "harm reduction."

"In this world when you don't have anything, you still have your dignity and you're going to fight to keep that dignity," he said.

Another group of volunteers came along carrying bags of blankets and clothing. They gave hats and gloves to the couple, who thanked them profusely. Across the street, meanwhile, where Wahbi was waiting with Bobby—and keeping him from falling down—Bullard arrived with cigarettes and a lighter. Bullard and Wahbi lit a cigarette for Bobby and helped him slip on a pair of Wahbi's gloves.

"I love you guys," Bobby said. "Thank you for helping me."

The two classmates answered together: "We love you, too, Bobby."



SOURCE: WEATHER.GOV, BU TODAY

SPH CAMPAIGN UPDATE

TOTAL RAISED BY SPH SO FAR

OF GOAL

CAMPAIGN GOAL

RANKING U.S. NEWS & **WORLD REPORT** GRADUATE

SCHOOLS OF PUBLIC HEALTH

APPLICATION NUMBERS

TOTAL APPLICATIONS AS OF AUGUST 2019

STUDENTS

STUDENTS AS OF AUGUST 2019

ALUMNI

*ESTIMATE AS OF AUGUST 2019



FACULTY

STAFF

2018 GRADUATE EMPLOYMENT



MEDIA MENTIONS



EMPLOYED IN DOMESTIC **PUBLIC** HEALTH

OR PURSUING

ADVANCED **EDUCATION WITHIN**

6 MONTHS OF GRADUATION

> EMPLOYED IN GLOBAL HEALTH **POSITIONS**

PEER-REVIEW PUBLICATIONS



SCHOLARSHIPS



IN 2019

RESEARCH AWARDS



Comics for the Greater Good

TRAINED IN HEALTH EDUCATION, WHIT TAYLOR (SPH'12)

is passionate about conveying complex health information to the public in a digestible way. Now she has turned what originated as a hobby into a powerful and effective medium for highlighting critical public health issues—comics.

A New Jersey-based cartoonist, comics editor, writer, and founder of Whit Taylor Comics, Taylor has embraced the resurging fields of comic journalism and graphic medicine to share personal, historical, and evidence-based knowledge about public health challenges.

"Using visuals to appeal to people is very effective, and the reason I like comics is the same reason I like public health— it's a way of communicating on a larger scale to people and imparting messages for the greater good, to impact health in a positive way," she says.

Taylor covers a variety of topics in her work, from personal reflections on her struggles with anxiety and depression, to educational commentary on the threat of pandemics. Among other topics, her comics have spotlighted lack of regulation by the Food and Drug Administration and the negative impacts of the Tuskegee syphilis experiment on the African American community. She has been published in notable outlets including the *New Yorker* and BuzzFeed.

Taylor notes that she receives a lot of positive feedback from readers who say her comics bring awareness and insight to issues they didn't understand or weren't aware of before they read her work.

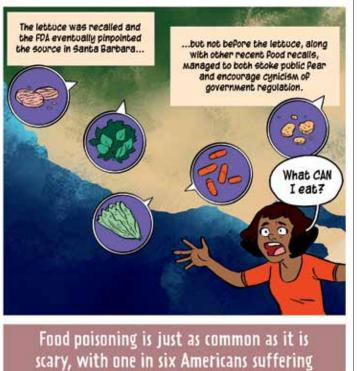
"My goal is to help people understand complicated subjects, and to also help them feel good about who they are and what they're experiencing," she says.



"Using visuals to appeal to people is very effective, and the reason I like comics is the same reason I like public health—it's a way of communicating on a larger scale to people and imparting messages for the greater good, to impact health in a positive way."

-WHIT TAYLOR (SPH'12), CARTOONIST, COMICS EDITOR, WRITER, AND FOUNDER OF WHIT TAYLOR COMICS





from foodborne illnesses every year.

Top: America Isn't Ready for a Pandemic. Here's How It Could Happen. By Whit Taylor for The Nib. Bottom: Food Used To Be a Lot More Dangerous by Whit Taylor and Maki Naro for The Nib.



"The entire mission is translating data into practice."

—SARAH LIPSON, ASSISTANT PROFESSOR OF HEALTH LAW, POLICY & MANAGEMENT

Gathering—and *Using*—Data on College Student Mental Health



300 COLLEGES AND UNIVERSITIES HAVE PARTICIPATED IN THE HEALTHY MINDS STUDY ANNUALLY.

SARAH LIPSON, assistant professor of health law, policy & management, coleads the Healthy Minds Study, the most comprehensive national survey focused on mental health in college student populations. The annual, web-based study has been fielded at more than 300 colleges and universities, with more than 300,000 student respondents to date.

"Numbers are powerful," Lipson says. But collecting data is not enough: "The entire mission is translating data into practice."

To do that, Lipson and her colleagues make their data publicly available, and create tools that campus practitioners, policymakers, advocacy organizations, and student groups can use to make changes at the campus level.

Their data visualization tool generates graphs showing the relationships between a range of mental health concerns, behaviors, and demographics, either nationally or on one campus. For school administrators wary of the cost of creating a counseling center or adding another behavioral health provider, their "economic case" calculator shows how campus mental health services pay for themselves in students (and tuition) retained, while increasing the lifetime earnings of alums. The team also runs workshops to help students learn to present the data and make evidence-informed cases more effectively, and Lipson points out that in the hands of students and other advocates, these resources have made real changes on campuses around the country.

As their study has expanded, they've been able to go into much more detail, examining disparities across demographics. Forthcoming research examines mental health among sexual- and gender-minority college students, and students with intersectional identities.

"Right now, it's in terms of disparities," Lipson says. "But the goal, what we're really working for, is equity."



ACTIVIST LAB JOINS
THE CAMPAIGN FOR
TRANSGENDER
PROTECTIONS IN
MASSACHUSETTS.

NO TO DISCRIMINATION.

when IRIS OLSON MOVED TO MASSACHUSETTS to pursue a master's in public health at the School of Public Health, they discovered that their own rights as a transgender person were up for debate—and a popular vote—in the commonwealth.

In 2018, Ballot Question 3 asked voters if they wanted to keep a 2016 law protecting people from discrimination in public places such as restaurants, public transportation, and doctors' offices because of their gender presentation or identity. Polls showed that Question 3 might be the closest vote of any on the ballot that year.

Soon, Olson discovered something else: Through the Activist Lab, SPH was going to get involved in the fight to protect the trans community and was looking for a student fellow to lead the charge. They applied for and got the fellowship.

"As a transgender person, I personally really appreciate that SPH and the Activist Lab focused in on this issue," Olson says. "For transgender people, as well as queer people in general, it meant, 'You are a priority. You're going to be a priority in how we're moving forward."

Activist Lab Director Harold Cox believes that it was a natural choice to join the "Yes on 3" campaign to keep the protections in place. "We knew that as activists and public health professionals, we couldn't stay neutral or stand on the sidelines," he says. "It is our responsibility to engage our faculty, staff, and students in real-world activism."

Working with Freedom for All Massachusetts, the campaign to keep the protections in place, Olson and the Activist Lab orchestrated awareness events and volunteer opportunities on the Medical and Charles River Campuses, including phone banks, canvasses, and a voter registration drive. Under the leadership of Dean Sandro Galea, students, faculty, and staff wrote op-eds, contributed financially, and joined the campaign as volunteers. The Activist Lab also encouraged discussion with a mock vote (94 percent of the Medical Campus community voted Yes), a rally on Talbot Green, and a Dean's Seminar with Mason Dunn, campaign co-chair of Freedom for All Massachusetts.



WE KNEW THAT AS ACTIVISTS AND PUBLIC HEALTH PROFESSIONALS. WE COULDN'T STAY NEUTRAL OR STAND ON THE SIDELINES. IT IS OUR **RESPONSIBILITY** TO ENGAGE **OUR FACULTY.** STAFF, AND STUDENTS IN **REAL-WORL**

HAROLD COX, ASSOCIATE DEAN FOR PUBLIC HEALTH PRACTICE, ASSOCIATE PROFESSOR OF COMMUNITY HEALTH SCIENCES, AND ACTIVIST LAB DIRECTOR

"Not only did SPH step up and take a stand when we needed it, but students, faculty, and staff also put in the work to ensure the rights and dignity of all people were upheld," Dunn points out.

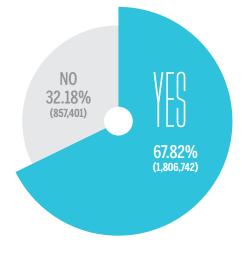
All of that work—by the campaign and by more than 1,500 coalition partners, including law enforcement, sexual assault prevention advocates, businesses, labor unions, faith leaders, educators, and professional sports teams—paid off. On November 6, 2018, almost 68 percent of Massachusetts voters upheld protections for transgender people.

"The work for lived equity for trans and nonbinary people in Massachusetts is far from complete, but we are one step closer thanks to students like Iris Olson, and institutions like SPH," Dunn says.

Olson notes that they have already seen some of the ways that the campaign has changed the SPH community, citing the example of several students and staff joining the successful spring 2019 campaign to pass a conversion therapy ban in Massachusetts.

Emily Barbo, the Activist Lab's communications manager, says the lab will be using the same model to get involved with other issues in the future. "I think we gave our school and local community a taste of what it is like to take a stand that improves health," she says. "That is exactly why the Activist Lab exists."

MASSACHUSETTS GENDER IDENTITY ANTI-DISCRIMINATION VOTE



SOURCE: BALLOTPEDIA.ORG

BOSTON GLOBE VIA GETTY IMAGE

Celebrating Urban Birds

ON A DEWY SUMMER AFTERNOON IN THE SOUTH END'S BLACKSTONE SQUARE, a group of children ignored the usual city hubbub of sirens and car horns on Washington Street. Instead, they focused on the dulcet sounds and sights of birds frolicking throughout the park.

Ranging from 5 to 12 years old, the children were participating in the fourth annual Celebrate Urban Birds event, a Cornell Lab of Orinthology bird-watching program that teaches children in underserved communities about nature, conservation, science, and data collection.

The local collaboration between the School of Public Health and the Blackstone Community Center is led by Amparo "Chary" Ortiz, senior financial administrator in the Department of Biostatistics and a member of the center's board of directors, as well as Anita DeStefano, professor of biostatistics.

"City life is always so hectic. I love that this event enables kids to stop and become aware of their surroundings," Ortiz says. "Birds are part of our everyday life, and it's great to be able to celebrate that connection each year with the children in my community."

Participants became citizen scientists for the afternoon as they peered through spotting scopes and binoculars to identify and record all of the bird species they could spot in 10-minute increments within a specific area of the park. The most commonly viewed bird was the tiny house sparrow, but they also observed American robins, common grackles, and European starlings, even catching a glimpse of a bird feeding worms to its young.

The kids drew histograms to display the data they collected, planted flowers outside of the center, and sketched pictures of birds and nature. Their information was added to the existing Celebrate Urban Birds data on the Cornell Lab's website.

"I love birds, but as a biostatistician, I also love statistics and science," DeStefano says. "These activities are a fun way to introduce children, and maybe budding scientists, to these subjects."

To underline the importance of bird observation and data collection, she shares the story of the once-endangered peregrine falcon: In the 1970s, the species was no longer found in Massachusetts due to the widespread use of the pesticide DDT. The chemical was banned after scientists identified the problem and implemented a recovery plan, and now there are 46 nesting pairs of peregrine falcons in Massachusetts—including one pair that recently called the Medical Campus home.



Anita DeStefano (right), professor of biostatistics at SPH, leads youth in a bird-watching session at the fourth annual Celebrate Urban Birds event in the South End's Blackstone Square.

"City life is always so hectic. I love that this event enables kids to stop and become aware of their surroundings. Birds are part of our everyday life, and it's great to be able to celebrate that connection each year with the children in my community."

—AMPARO "CHARY" ORTIZ, SENIOR FINANCIAL ADMINISTRATOR, DEPARTMENT OF BIOSTATISTICS

students

BOSTON UNIVERSITY SCHOOL OF PUBLIC HEALTH | SPH THIS YEAR 2019 | 47

Informing and Inflecting the Broader Conversation on Health

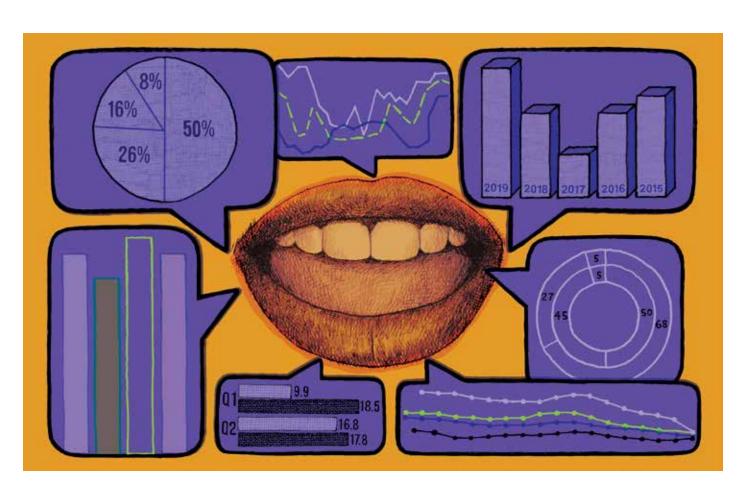
"THOUGHT LEADERS in public health and clinical medicine are experts in researching, designing, implementing, monitoring, and evaluating studies to improve population health, but there is a gap in translating their results into stories accessible to the general public," says Nicholas Diamond (SPH'17), managing editor of Public Health Post (PHP). "That's our job."

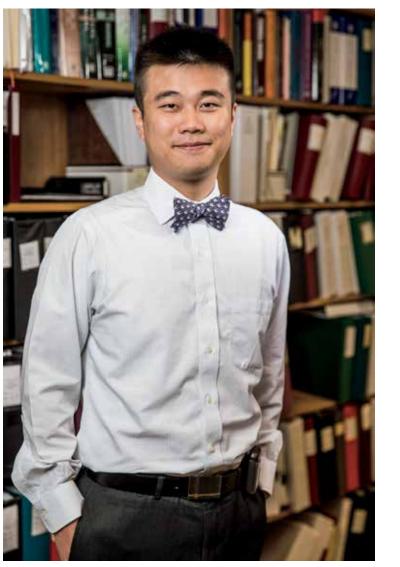
PHP launched three years ago with the goal of writing about the public health landscape and having PHP's authors populate that landscape with health statistics, traditional journalism, research summaries, interviews with important health thinkers, and easy-to-understand data graphics to start new conversations about health.

"We do what no one else in the media does," says Michael Stein, PHP executive editor and chair of the Department of Health Law, Policy & Management. "We write every day about the people, places, politics, and principles that produce and promote the health of Americans."

PHP engages policymakers, journalists, scholars, students, and public health professionals to write for its anchor site at publichealthpost.org and disseminates these daily pieces through social media channels and in weekly newsletters. Select Boston University graduate students also serve as PHP fellows and train to be the next generation of public health professionals with experience in health communications. These students research and write the powerful stories on population health and social justice that sustain PHP, while driving the national dialogue on public health issues and participating in a start-up culture with a diverse team of writers and editors.

"At PHP, we want to bring research to the populations most likely to benefit from that research, while making the general public aware of the important health issue of the day," Diamond stresses. "We are using communications as advocacy for better health outcomes."





"Every improvement project I work on and every patient safety incident I investigate is different," he says. "I learn new things every week."

 YIGU CHEN (SPH'12), QUALITY AND PROCESS IMPROVEMENT CONSULTANT, DEPARTMENT OF PATHOLOGY AND LABORATORY MEDICINE. BETH ISRAEL DEACONESS MEDICAL CENTER

Think. Teach. Do. Is Exactly What I'm Doing.

YIGU CHEN (SPH'12) has worked as a quality and process improvement consultant in the Department of Pathology and Laboratory Medicine at Beth Israel Deaconess Medical Center for almost five years, during which time he claims no two days have been the same.

alumni 🖇

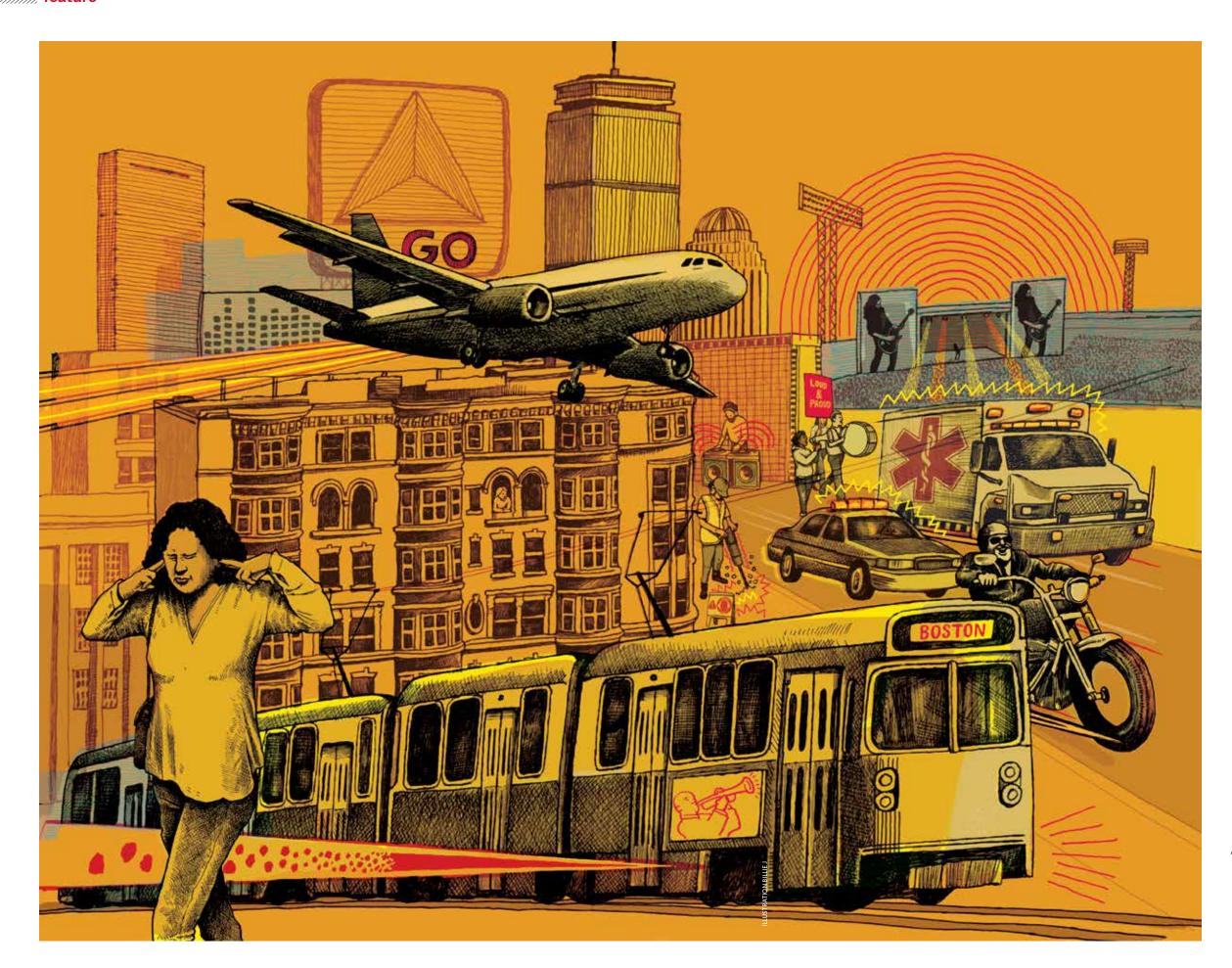
"Every improvement project I work on and every patient safety incident I investigate is different," he says. "I learn new things every week."

Chen, who studied health policy and management at SPH, developed a total quality management program for the department, which is comprised of 16 laboratory divisions and more than 400 staff members. He oversees quality data collection and reporting and provides decision support on topics including workflow improvement, staff performance, productivity, and value analysis—all tasks that he says he was fully prepared to manage, thanks to the biostatistics and management elective courses he took at SPH.

When not immersed in data analytics, he facilitates strategy changes within the department to transform the culture of quality and patient safety. After years of tracking performance indicators in a manual and siloed fashion, he developed a real-time digital dashboard that monitors more than 70 indicators.

Chen also holds a joint faculty appointment at Harvard Medical School, where he teaches quality improvement workshops and conducts patient safety research.

"I'm not sure if it's a coincidence, but Think. Teach. Do. is exactly what I'm doing," Chen notes, referring to SPH's core purpose. "The school has prepared me so well for this job."



SOUND, ANNOYANCE, AND THE EFFECT ON HEALTH IN BOSTON'S NEIGHBORHOODS.

MAKING SOME NOISE ABOUT

"AS SOUND GETS LOUDER, we begin to see the impacts go from annoyance to very serious health impacts," says Erica Walker, postdoctoral associate in the Department of Environmental Health and creator of the new Community Noise Lab.

feature

BOSTON UNIVERSITY SCHOOL OF PUBLIC HEALTH | SPH THIS YEAR 2019 | 51

he explains that not all sound is equal. Someone's favorite music could be playing at 120 decibels, and, for them, the sound is enjoyable. If their neighbor hates hearing that same music—even if only at 65 decibels—it is noise, and may have more of an impact on the neighbor's health than on the health of the person playing the music.

44

I'M SHARING
THE RIDE WITH
OTHERS WHO
HAVE THEIR OWN
NOISE-RELATED
JOURNEYS AND
DESTINATIONS.
THAT'S MY
DEFINITION OF

DEPARTMENT OF ENVIRONMENTAL HEALTH AND CREATOR OF THE COMMUNITY NOISE LAB

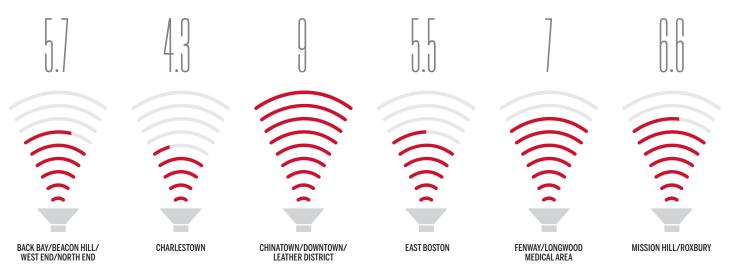
Because the difference between sound and noise is subjective, the Community Noise Lab is working directly with activists in communities affected by noise pollution in the Boston area: the Fenway, Mission Hill, East Boston, and the nearby town of Andover. Together, they are measuring and taking on not only the volume of sound, but also the irritation of noise.

"In the Fenway, they're telling me, 'We're bothered by outdoor concerts at Fenway Park.' If I'm an epidemiologist and I'm using Fenway as a sample and I'm looking at the impact of aircraft noise on cardiovascular health, that may not be the noise that's driving the health impact. I would be misclassifying the experience," Walker says.

With a two-year, \$410,000 grant from the Robert Wood Johnson Foundation, the Community Noise Lab is working with members of the four communities and researchers and students across Boston University to create a real-time sound-monitoring network of eight rotating sound stations. They are also developing version 2.0 of the Community Noise Lab's smartphone app, NoiseScore, which allows residents to both objectively and subjectively describe their environmental soundscape and their own responses in real time. In addition, Walker is leading a series of community-engagement activities, including "sound walks" and a podcast, and conducting a laboratory-based experiment examining the acute neurological underpinnings of noise exposure.

All of the Community Noise Lab's work will be documented on its website, where each of the four communities has a dedicated page. Meanwhile, the site's community library offers free access to fact sheets, reports, and data for researchers and community members alike.

STREET NOISE PERCEPTION BY NEIGHBORHOOD ON A SCALE OF 1-10



SOURCE: BOSTON.NOISEANDTHECITY.ORG

Walker describes the lab's approach as "ride-sharing." While gathering data from these four communities, "I'm sharing the ride with others who have their own noise-related journeys and destinations," she says. "That's my definition of public health."

The response has been enthusiastic. "People are really excited—everybody wants the sound-monitoring equipment in their house!" says Mary Ann Nelson, executive director of Mission Hill Health Movement, adding that the collaboration is making her neighborhood think about solutions to forms of noise pollution that they had thought were inescapable.

For example, longtime residents automatically pause conversations for an ambulance siren or house-rattling train, often without even realizing it. "Everyone was just accepting the noise associated with the hospitals and the Orange and Green Lines, thinking there was nothing that could be done about it," Nelson notes. Now, the community is excited about what kinds of solutions the Community Noise Lab's research could lead to, like design guidelines for new buildings, or area hospitals helping offset the costs of new windows for residents.

Nelson is optimistic: "I think this is going to make a big difference."

Central American Kidney Disease Epidemic Linked to Occupational Heat Exposure

A MYSTERIOUS FORM OF CHRONIC KIDNEY DISEASE

(CKD) has claimed thousands of lives over the last two decades in Nicaragua and El Salvador. A team of SPH and National Autonomous University of Nicaragua (UNAN) researchers has been on the case since 2008, and a recent study of brickmakers adds to their evidence that the epidemic is linked to occupational heat exposure.

Published in the *American Journal of Kidney Diseases*, the study found 12.1 percent of a sample of artisanal brickmakers in La Paz Centro, Nicaragua, had CKD, and the disease was particularly common among individuals who worked with the ovens for baking bricks.

"Clinicians in the region have said that sugarcane workers are not the only people affected by this disease, despite the media attention they receive, and we were told by brickmakers that oven workers were at greatest risk," says Madeleine Scammell, associate professor of environmental health, who was the study's co-senior author with Marvin González Ouiroz, an instructor at UNAN.

"It turns out their observations were spot-on."

The research team (which also includes Yorghos Tripodis, research associate professor of biostatistics; Daniel Brooks, associate professor of epidemiology; Michael McClean, professor of environmental health; and doctoral student Komal Basra) is conducting ongoing studies into family histories and genetics, agricultural workers, and miners. Since completing the brickmaker study, the Nicaragua researchers have helped set up monthly clinics in La Paz Centro with a nephrologist for additional care and follow-up for CKD patients.

"We knew from going to the health clinic in La Paz Centro that kidney disease was a real problem, but we did not anticipate how high the prevalence would be, or how severe some of the cases," Scammell says.



In Chichigalpa, Nicaragua, a woman and her son stand with a portrait of his father, who passed away from chronic kidney disease.

"Clinicians in the region have said that sugarcane workers are not the only people affected by this disease, despite the media attention they receive, and we were told by brickmakers that oven workers were at greatest risk."



Students Produce Video to Promote Walkability

DUBBED A "WALKER'S PARADISE," "runner's mecca," and one of the country's "best bike cities," Boston is no stranger to foot (and bike) traffic. But a daily commute or jog is no walk in the park with uneven sidewalks, poorly defined pathways, or malfunctioning pedestrian signals.

For a project in the course Designing and Implementing a Health Communications Campaign, second-year MPH students Benjamin Miller, Sharon Khama, TraciAnn Hoglind, and Shweta Palakkode produced a video to shed light on pedestrian safety issues and promote safe walking conditions in Massachusetts. The video served as a promotional tool for WalkBoston, a nonprofit organization that advocates for a variety of pedestrian needs.

Adjunct Professor Kim Kronenberg, who taught the course, says the assignment offered students a "unique, hands-on opportunity to plan, develop, produce, and distribute a video production that meets the needs of a client."

Miller says he was surprised to discover that Boston's streets are not as pedestrian-friendly as he once thought—and pleased to be able to deliver that message through the video.

"The video was designed to connect people to an organization that can help them achieve their walking and transportation needs," Miller says.

Kronenberg believes the project helped students see the value of video as a public health messaging mechanism.

"The course really teaches strategic planning, thinking, and development, and the video is the vehicle for teaching about health communication," Kronenberg says. "The students were able to hone the message down to 49 seconds and deliver it in a very appealing fashion."

WHERE WALKBOSTON WORKS



SOURCE: WALKBOSTON.ORG, BOSTON UNIVERSITY SCHOOL OF PUBLIC HEALTH

"The video was designed to connect people to an organization that can help them achieve their walking and transportation needs."

WINNING HEARTS AND MINDS IS THE KEY TO SUCCESSFUL PUBLIC HEALTH ADVOCACY.



feature



SPH alum Jirair Ratevosian (SPH'07) cultivates public health partnerships with international stakeholders to expand access to lifesaving medicines for infectious diseases.

44 WHAT I'VE **LEARNED IS THAT POLICY WORK IS ABOUT** IT'S EASY TO DISCONNECT FROM POLICY AND FEEL AS IF IT **DOESN'T IMPACT** YOU. BUT IT'S THE JOB OF A **PUBLIC HEALTH** ADVOCATE AND **ACTIVIST TO MAKE SURE** THAT PEOPLE **CAN TOUCH IT** AND FEEL IT AND SEE IT." JIRAIR RATEVOSIAN (SPH'07), EXECUTIVE DIRECTOR, GOVERNMENT AFFAIRS FOR AFRICA AND CUBA, GILEAD SCIENCES

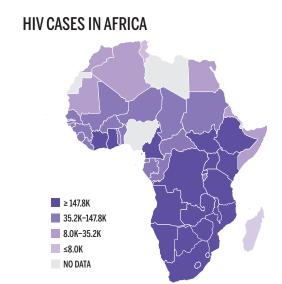
"What I've learned is that policy work is about hearts and minds," says Ratevosian, who received a 2016 40 Under 40 Leader in Health Award from the National Minority Quality Forum for his career accomplishments. "It's easy to disconnect from policy and feel as if it doesn't impact you, but it's the job of a public health advocate and activist to make sure that people can touch it and feel it and see it."

Since completing his MPH with a concentration in international health and a certificate in Managing Disasters and Complex Humanitarian Emergencies, Ratevosian has championed issues of human rights, social justice, HIV/AIDS, and the LGBTQ community through policy and advocacy leadership roles in the government, nonprofit, and private sectors.

"The faculty at SPH definitely instilled this action-oriented sense in me to carry forward, whether it's through research, advocacy policy, or implementation science," he notes. "There are things that need continual vigilance and fighting and advocacy. If we as public health professionals don't do it, who's going to do it?"

With that approach, Ratevosian jump-started his career organizing and evaluating Ryan White HIV funding in the Boston area. He then served as a national field organizer for the Physicians for Human Rights Health Action AIDS campaign before becoming deputy director at the Foundation for AIDS Research (amfAR), where he worked to lift restrictions for syringe access programs and the travel entry ban for individuals living with HIV.

After establishing relationships with lawmakers, Ratevosian decided to dive directly into politics, and in 2011 became the legislative director for US Congresswoman Barbara Lee, who represents California's 13th district. Lee tapped him to serve as lead staff author of the 400-page Health Equity and Accountability Act, which addressed policies and provisions of minority health disparities not covered in the Affordable Care Act.



SOURCE: AIDSINFOONLINE.ORG

Ratevosian was one of five staff members from the House and Senate team who drafted the President's Emergency Plan for AIDS Relief (PEPFAR) Stewardship and Oversight Act of 2013, which reauthorized funding for the landmark bipartisan initiative that provides critical, global resources to treat and prevent the spread of HIV and AIDS in Africa. "It was a rare privilege to contribute to a piece of legislation that becomes law, and PEPFAR continues to be an important program that saves lives around the world," he says.

To become fully immersed in global health issues, Ratevosian transitioned to the private sector as an executive director at Gilead in 2014. In this role, he cultivates public health partnerships with international stakeholders and government officials to expand access to lifesaving medicine for HIV and AIDS, hepatitis, and other infectious diseases.

"A lot of the work I do is corporate social responsibility," he explains. "The company is doing great work to make sure that any person in Africa living with HIV or hepatitis has access to the same technology and the same medications that people in Boston or London have, and it's great to be able to implement that."

alumni



"I always wanted to work in public health and health care, and I chose the Army because it has a plethora of job opportunities in the healthcare field that interest me."

-SAMANTHA CORDOVA (SPH'18), PREVENTIVE MEDICINE SPECIALIST, ARMY MEDICAL SERVICE CORPS

tion, as well as exposures to occupational and environmental health risks and threats. It's great coming in with an MPH, because I've discussed these concepts in classes, but when you talk about an epidemic in the military world, it's on a whole different scale.

Q: What was basic combat training like?

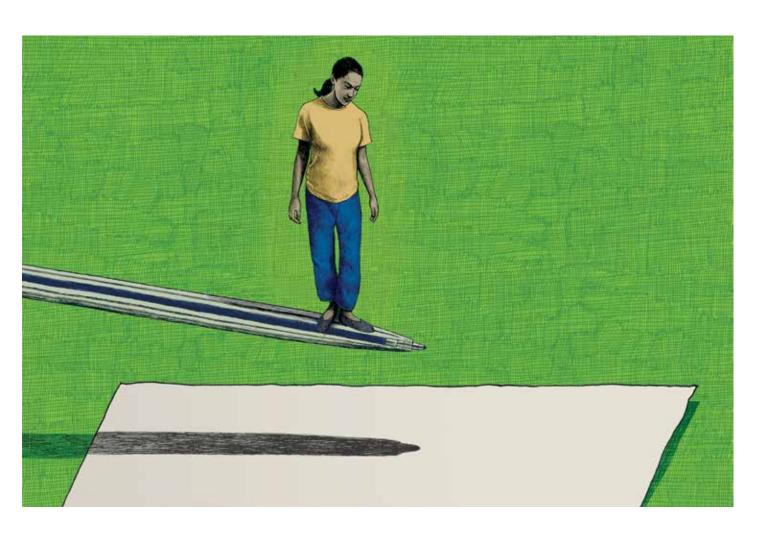
It was unlike anything you'll ever do in life. It breaks you down to build you back up. No one is there holding your hand or telling you "you can do it"—you just have to be very good at motivating yourself, following directions, and listening to your leaders.

Q: Have you bonded with fellow recruits?

Yes, you build a camaraderie with people that is an experience you can't really share with anyone else. I can tell people what I've been through, but unless you've done it, you don't really

Q: What are your plans for the future, with regard to the Army and your public health career?

I'd like to work in the public or government sector, and I'm interested in doing policy or prevention work for the VA in Colorado, because the veteran population is true to my heart. My long-term goal is to go back to school to get my doctorate in public health. I would love to give back to the public health profession and teach as a professor. And if I have to be deployed overseas for a mission, I will go where I'm called.



Writing Guide Serves as Online Student Resource

PERHAPS IT'S THE TEDIOUS ORGANIZATIONAL

PROCESS or the endless quest for the perfect word, but writing assignments often provoke frustration and self-doubt among public health students.

To ease their stress and facilitate the writing process, the School of Public Health launched the Public Health Writing Guide, designed to help students improve their prose, increase productivity, and meet the specific needs of their readers. The online guide is the latest addition to the school's Public Health Writing Program, which provides one-on-one writing sessions with a peer coach, faculty assistance in developing writing assignments, and in-class trainings for students.

"We often expect our students to be able to write when they come here," says Jennifer Beard, clinical associate professor of global health and director of the Public Health Writing Program. "If they haven't

written in a while, they get rusty, and need lots of practice and people who will talk to them about

The guide offers strategies for a variety of documents that public health professionals might produce over their careers, including literature reviews, grant proposals, policy briefs, and letters to the editor. Ultimately, Beard hopes to expand it and incorporate input from public health professionals and academics at other schools; she and Mary Murphy-Phillips, director of Graduate Student Life, currently serve on a working group convened by the Association of Schools and Programs for Public Health that is developing additional resources to support public health writing for students.

"The goal isn't just to help students get a good grade," she adds. "These are skills that they will be able to use when they go out into the real world."

Unlike Anything You'll Ever Do in Life

"WHAT IF I BECAME PART OF THE POPULATION that I wanted to work with?"

This notion occurred to Samantha Cordova (SPH'18) shortly after she began the MPH program in fall 2016 and attended a presentation by David Villarroel (SPH'11), a US Army medical service corps officer. She found his words and life story inspiring and in alignment with her own professional goals.

And so, a few months after graduating, Cordova joined the Army Reserves to become a preventive medicine specialist in the Army Medical Service Corps.

"I always wanted to work in public health and health care, and I chose the Army because it has a plethora of job opportunities in the healthcare field that interest me," she explains.

Q: Can you describe the responsibilities of a preventive medicine specialist in the Army?

I do a lot of work to help prevent disease outbreaks, health hazards, and health risks for our armed forces when they are deployed or living on base. I educate troops and commanders on preventive measures for disease, illness, and injury preven-

The Healing Power of Hip-Hop

HIP-HOP MUSIC'S MESSAGES OF JUSTICE, EQUITY, SELF-WORTH, AND EMPOWERMENT make it a powerful medium that people can connect with, says Master of Public Health student Rafik Wahbi.

As a musician and avid fan of socially conscious rappers such as Nas and Kendrick Lamar, Wahbi understands the therapeutic power of the genre, which originated as an outlet for black and Latinx communities to voice the realities of oppression and discrimination in America.

Last summer, Wahbi integrated these concepts of self-reflection and healing into a hip-hop writing class that he designed and led for inmates at the Suffolk County House of Correction at South Bay in Boston. The eight-week project was funded by the Activist Bucks micro-grant program.

"In Massachusetts and in the US, black and Latino populations are disproportionately incarcerated, so I wanted to develop a program that inmates might identify with better than other programs in the system," he explains.

Wahbi taught 15 to 20 adult participants of all ages who were receiving treatment for substance misuse as they awaited trials for crimes that carried a maximum sentencing of two-and-a-half years. In each weekly class, he explained writing techniques such as analogies, similes, and metaphors before playing songs by N.W.A., A Tribe Called Quest, and other artists. Then, the class analyzed the lyrics, discussed themes, and penned their own lyrics to share with each other.

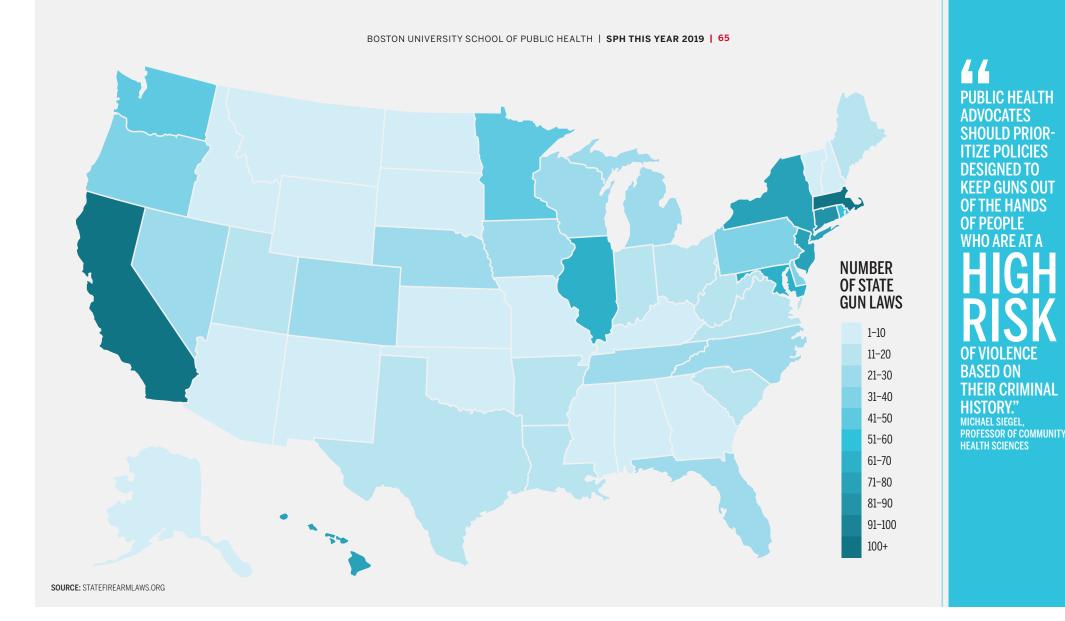
"My goal was to provide inmates with a creative outlet to process their incarceration and the events that led to their situation, as well as their hopes for the future once they are able to reintegrate into society," Wahbi says. "Certain emotions and realizations can be easier to express on paper, rather than to a counselor or to themselves as they sit alone in a cell."



"My goal was to provide inmates with a creative outlet to process their incarceration and the events that led to their situation, as well as their hopes for the future once they are able to reintegrate into society."

feature

NUANCE CAN GIVE BETTER DIRECTION ON HOW TO PREVENT FIREARM INJURIES AND DEATHS. OF THE PROPERTY OF THE PROPER



HOW DO YOU KNOW IF UNIVERSAL BACK-GROUND CHECKS WORK if the definition is anything but universal?

The nation's patchwork of firearm legislation provides a kind of natural experiment for researchers looking for ways to effectively prevent gun deaths and injuries—but there is a catch. "There are many exemptions and nuances of firearm laws, so what one person means by a particular type of law could be totally different than what someone else means," points out Michael Siegel, professor of community health sciences.

To help researchers evaluate the actual content and enforcement of laws, Siegel and his colleagues created the State Firearm Laws Database. Funded by the Rob-

ert Wood Johnson Foundation Evidence for Action Program, the database includes all state firearm legislation back to 1991 and is constantly updated as states add—and subtract—gun laws. Every provision of every law is carefully coded so that researchers don't find themselves comparing apples to oranges.

For example, Siegel says, both California and Arizona have laws prohibiting the sale of ammunition to minors. But Arizona has an exemption: "It is not a crime in Arizona to sell ammunition to a minor as long as they have a note giving them parental permission," Siegel says. So, in the database, California is coded as really having a ban on selling ammunition to minors, but Arizona is not. That way, researchers

can see what happens when minors can never buy ammunition, when they can buy ammunition with parental permission, and when they don't need permission at all.

According to Molly Pahn (SPH'15), who did much of the work of compiling the state law data as a research assistant after completing her MPH, "This database came at an important time, as the views of the public are both changing and polarizing on the issue of gun violence." A political science major as an undergraduate, Pahn interned at the state legislature in Tennessee, and had experience researching legislation with the Westlaw database. She is also from Memphis, a city that has long had one of the highest gun violence rates in America, a factor that motivated

her to work on firearm legislation at SPH and as a law student in Tennessee.

Ziming Xuan, associate professor of community health sciences and co-investigator on the team, explains that National Rifle Association—backed federal laws have limited gun research for decades, making it challenging still to identify which policies will actually save lives—which is where the State Firearm Laws Database comes in. "It helps align concerted efforts to focus on advocacy for several key, effective policies, rather than diverting resources on actions that are not necessarily effective in reducing gun violence," he explains.

This year, Siegel, Xuan, Pahn, and their colleagues published the first study to directly compare the association between

state-level homicide rates and a set of state gun laws in one statistical model, thanks to the database. Siegel reports their takeaway: "Public health advocates should prioritize policies designed to keep guns out of the hands of people who are at a high risk of violence based on their criminal history."

There are many other studies ongoing and much to examine, including the State Firearm Laws Database finding that gun law effectiveness in a state is limited by the flow of guns from nearby states with lax laws. But the three researchers agree that their work will pay off. Says Pahn, "If just one life is saved, it will be worthwhile."

Evaluation Matters

AS A PUBLIC HEALTH ANALYST at the Department of Behavioral Health (DBH) in Washington, DC, Ashley King (SPH'16) is committed to ensuring that the critical services the department provides are actually effective for the city's children, youth, and adults who need it the most.

"Evaluation is so important," says King, who studied social and behavioral sciences at SPH and now works in the substance use disorder prevention branch under the DBH community services administration. "We can offer programs and provide health communication materials, but we have to know if we're making an impact and doing the things that we intended to do."

King collects and analyzes local and national data on substance misuse—including tobacco, alcohol, and drugs—among youth and young adults aged 10 to 24. She then develops targeted educational materials for presentations and social media messaging geared toward youth and at-risk populations who are experiencing substance misuse and related health issues.

"I'm always looking to see how we can better inform our work and discover new ways to intervene and delay the onset of drug use, or prevent it altogether," she adds.

A DC native, King finds it satisfying to have the opportunity to improve her hometown: "My job keeps me constantly thinking about how we can support the next generation. These are people who live in the neighborhoods that I know and love. Being able to think of ways to make this city safer and healthier is really exciting."



"We can offer programs and provide health communication materials, but we have to know if we're making an impact and doing the things that we intended to do."

—ASHLEY KING (SPH'16), PUBLIC HEALTH ANALYST, DEPARTMENT OF BEHAVIORAL HEALTH, WASHINGTON, DC





Emily Rothman (center), professor of community health sciences at SPH, walks with Rebecca Stone (left), assistant professor of sociology at Suffolk University, and Diane Kinney (right), codirector of Circle in Barre, Vermont,

violence and opioid use disorder, aiming to better address the overlapping public health crises.

"Right now, people are told, 'You have opioid use disorder? Go here. You're experiencing intimate partner violence? Go here," she says. "A human being doesn't work like that. They need help with what's actually happening in their lives."

Like many rural areas across America, Washington County was hit hard by the opioid epidemic; 12 county residents died from opioids in 2018 out of a population of under 60,000 people. In the same year, another 12 Washington County residents that gap." were murdered by a current or former partner.

overlap is long overdue. "In the last two years, we

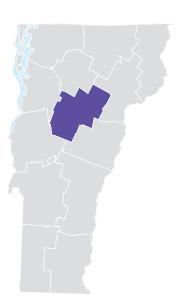
have had six women whom we have been involved with die, and only one of the women was not opioidinvolved," she relates. "We have had women in the shelter who are attempting to do their opioid use disorder treatment and run into their abuser."

Stone adds, "We have the substance use treatment sector, and we have the intimate partner violence response sector, and they might not be understanding each other or working to meet women who are in the middle.

"We want to learn how women are falling into

The research team will work in three phases Kinney believes that paying attention to the over the course of the three-year grant. In the first, current phase, they are interviewing 40 Vermont **RIGHT NOW, PEOPLE ARE** TOLD, 'YOU HAVE OPIOID **USE DISORDER?** GO HERE. YOU'RE **EXPERIENCING** INTIMATE **PARTNER VIOLENCE?** GO HERE! A LIKE THAT. THEY **NEED HELP WITH** WHAT'S ACTUALLY **HAPPENING IN** THEIR LIVES." EMILY ROTHMAN, PROFESSOR OF COMMUNITY HEALTH SCIENCES

DEATHS IN WASHINGTON COUNTY, VERMONT



RESIDENTS DIED FROM OPIOIDS

WERE MURDERED BY A CURRENT OR

SOURCE: HEALTHVERMONT.GOV

EMILY ROTHMAN IS BACK TO WORK in Barre. Vermont, a former granite-quarrying town about 20 minutes outside of Montpelier in Washington County.

When the professor of community health sciences was a new college graduate in 1996 and 1997, Rothman first worked in Barre at Circle, a local organization and shelter serving women experiencing intimate partner violence. Two decades later she has returned, thanks to a \$350,000 grant from the Robert Wood Johnson Foundation's Interdisciplinary Research Leaders program. Together with Diane Kinney, Circle's codirector, and Rebecca Stone, an assistant professor of sociology at Suffolk University, Rothman is researching the intersection of intimate partner



feature



Emily Rothman and colleagues examine the intersection of intimate partner violence and opioid use disorder

> THE RESEARCH TEAM WILL **WORK IN THREE PHASES** OVER THE COURSE OF THE THREE-YEAR GRANT.

women who have struggled with opioids in the last five years and experienced partner violence in the last 10. In these interviews (anonymous and over the phone), women share their experiences and then are asked what could have helped them—what services, logistics, support, or knowledge would have made getting help and getting out of these situations less difficult.

Revisiting these periods can be painful for the interviewees, says MPH student Julia Campbell, who has been conducting most of these interviews as Rothman's research assistant. But the women have been eager to tell their stories in order to help other women facing these issues. "Everyone I've spoken to so far has been able to say, 'This is the hard stuff I have dealt with, but this is how I'm doing better, this is what's helped me, and this is what I recommend for other women to get help, too," Campbell says.

The team is also recruiting an advisory board of five women who have experienced both opioid use disorder and partner violence. The project's guiding principle is a phrase borrowed from the disability rights movement: "Nothing about us

Advisory board member Liz McDougal, a substance use disorder recovery coach at Central Vermont Medical Center, says that opioid misuse and partner abuse go together more often than not. "It's really hard to have a healthy relationship with an active addiction, with the desperation that comes with addiction and withdrawal," she explains.

Treating the overlapping problems can present other issues as well: "I constantly see people go into recovery together, and then one of them changes their mind and pulls the other one out. Then you have the resentment and blame: 'It's your fault that I'm back in this position, and you owe me because of that."

After interviewing 40 women, as well as stakeholders, the researchers and advisory board will come together to interpret the findings and use human-centered design principles to generate possible solutions; in the third phase, the researchers will implement and evaluate some of them.

Rothman says the solutions may wind up being fairly simple, like transportation assistance or a women-only opioid treatment meeting group. "They do not have to be expensive fixes," she says, before correcting herself: "Or they could be expensive! Then, our job becomes lobbying legislators and using those public health skills to show the return on investment." (As part of their grant, Rothman, Kinney, and Stone recently went to Washington, DC, for a lobbying training.)

"Partner violence is seen as this crunchy women's issue," Rothman notes, with funding and attention scarce. "You have to keep pivoting. If 100 percent of all public health research money was going to Ebola, I would look at the relationship between Ebola and partner violence."

Campbell agrees that intersections are exactly where public health needs to direct its attention.

"People who have one vulnerability have other vulnerabilities," she says. "It's sad to think about, but you have to think about it if you want to do anything good.

"You can't just do one thing." A poster in Circle's cozy administrative offices (which are located separately from the shelter, to protect the women

receiving services) reads, "The best activism is equal parts love and equal parts anger."

THE BEST

Activism

EQUAL PARTS

LOVE

& BUCAL PARTS

ANGER

Rothman says that perfectly describes her work since she first started at Circle more than 20 years ago. "Here was this issue where I could express both love and outrage, anger and survival," she says. "It felt like the right issue for me."







DEAN AND ROBERT A. KNOX PROFESSOR

Sandro Galea

INTERIM DIRECTOR OF COMMUNICATIONS

Melissa Davenport

EXECUTIVE EDITOR, SPH THIS YEAR

Meaghan Agnew

WRITERS

Jillian McKoy

Sara Rimer

Michelle Samuels

CONTRIBUTING WRITERS

Pamela Cooley

Ken Lewis

ILLUSTRATOR

Billie J / agencyrush.com

PRINCIPAL DESIGNER

Susan Prentiss

ASSOCIATE CREATIVE DIRECTOR

Carla Baratta

EXECUTIVE CREATIVE DIRECTOR

Mark Chamberlain

With thanks to Kara Peterson,

Executive Director of Communications

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